

**DRAFT**

Page 1 of 32  
Permit No. WA0040827

Issuance Date: \_\_\_\_\_  
Effective Date: Reserved for Issuance  
Expiration Date: Reserved for Issuance

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM  
WASTE DISCHARGE PERMIT No. WA-00408027

State of Washington  
DEPARTMENT OF ECOLOGY  
Olympia, Washington 98504-7600

In compliance with the provisions of  
The State of Washington Water Pollution Control Law  
Chapter 90.48 Revised Code of Washington  
and  
The Federal Water Pollution Control Act  
(The Clean Water Act)  
Title 33 United States Code, Section 1342 et seq.

Puget Sound Energy  
P.O. Box 97034  
Bellevue, WA 98009

is authorized to discharge in accordance with the Special and General Conditions that follow.

<u>Facility Location:</u> Jackson Prairie Gas Storage Facility 239 Zandecki Road Chehalis, WA 98532	<u>Receiving Water:</u> Cowlitz River & Ground
	<u>Discharge Location (Cowlitz River) Outfall 001:</u> <b>Site 1 :</b> Latitude: 46.4575 N Longitude: 122.8083 W <b>Site 2:</b> Latitude: 46.46444 N Longitude: 122.7672 W
	<u>Outfall 002 (Injection Well)</u> Latitude: 46.53278 N Longitude: 122.835W
<u>Industry Type:</u> Natural Gas Distribution and Storage, SIC 4922	

is authorized to discharge in accordance with the special and general conditions which follow.

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Garin Schrieve, P.E.  
Southwest Region Manager  
Water Quality Program  
Washington State Department of Ecology

**TABLE OF CONTENTS**

SUMMARY OF PERMIT REPORT SUBMITTALS ..... 4

**SPECIAL CONDITIONS**

S1.	DISCHARGE LIMITS .....	5
A.	Process Wastewater Discharges	
B.	Specific Prohibitions, Injection Well	
S2.	MONITORING REQUIREMENTS .....	6
A.	Monitoring Schedule	
B.	Sampling and Analytical Procedures	
C.	Flow Measurement, Field Measurement and Continuous Monitoring Devices	
D.	Laboratory Accreditation	
E.	Request for Reduction in Monitoring	
S3.	REPORTING AND RECORDKEEPING REQUIREMENTS .....	10
A.	Reporting	
B.	Records Retention	
C.	Recording of Results	
D.	Additional Monitoring by the Permittee	
E.	Reporting Permit Violations	
F.	Other Reporting	
S4.	CLASS II WELL CONSTRUCTION AND OPERATION REQUIREMENTS.....	14
A.	Construction Requirements	
B.	Operating Requirements	
C.	Mechanical Integrity	
D.	Well Failures	
E.	Plugging and Abandonment	
S5.	OPERATION AND MAINTENANCE .....	15
A.	Bypass Procedures	
B.	Duty to Mitigate	
S6.	APPLICATION FOR PERMIT RENEWAL .....	17
S7.	NON-ROUTINE AND UNANTICIPATED DISCHARGES .....	17
S8.	SPILL PLAN .....	18
	GENERAL CONDITIONS .....	20
G1.	SIGNATORY REQUIREMENTS.....	20
G2.	RIGHT OF INSPECTION AND ENTRY .....	21
G3.	PERMIT ACTIONS.....	21
G4.	REPORTING PLANNED CHANGES.....	23
G5.	PLAN REVIEW REQUIRED .....	23
G6.	COMPLIANCE WITH OTHER LAWS AND STATUTES .....	23
G7.	TRANSFER OF THIS PERMIT .....	23
G8.	REDUCED PRODUCTION FOR COMPLIANCE .....	24

G9.	REMOVED SUBSTANCES .....	24
G10.	DUTY TO PROVIDE INFORMATION .....	24
G11.	OTHER REQUIREMENTS OF 40 CFR.....	24
G12.	ADDITIONAL MONITORING .....	24
G13.	PAYMENT OF FEES.....	24
G14.	PENALTIES FOR VIOLATING PERMIT CONDITIONS.....	24
G15.	UPSET .....	25
G16.	PROPERTY RIGHTS.....	25
G17.	DUTY TO COMPLY .....	25
G18.	TOXIC POLLUTANTS.....	25
G19.	PENALTIES FOR TAMPERING .....	25
G20.	REPORTING REQUIREMENTS APPLICABLE TO EXISTING MANUFACTURING, COMMERCIAL, MINING, AND SILVICULTURAL DISCHARGERS .....	26
G21.	COMPLIANCE SCHEDULES .....	26
APPENDIX A.....		27

**SUMMARY OF PERMIT REPORT SUBMITTALS**

Refer to the Special and General Conditions of this permit for additional submittal requirements.

<b>Permit Section</b>	<b>Submittal</b>	<b>Frequency</b>	<b>First Submittal Date</b>
S3.A	Discharge Monitoring Report	Monthly	<i>Reserved for Issuance</i>
S3.E	Reporting Permit Violations	As necessary	
S3.F	Other Reporting	As necessary	
S4 A	Construction Requirements	As necessary	
S4. B	Advanced Notification of Mechanical Integrity Test	At least 2/permit cycle	Prior to use of well SU909
S4. C	Result of Mechanical Integrity Test	At least 2/permit cycle	30 days after the test
S4E	Report Conversion or Abandonment	As necessary	45 days after conversion or abandonment
S5.A	Reporting Bypasses	As necessary	
S6.	Application for Permit Renewal	1/permit cycle	January 2, 2014
S8.	Spill Plan	1/permit cycle, updates submitted as necessary	January 2, 2014
G1.C.	Notice of Change in Authorization	As necessary	
G4.	Permit Application for Substantive Changes to the Discharge	As necessary	
G5.	Engineering Report for Construction or Modification Activities	As necessary	
G7.	Notice of Permit Transfer	As necessary	
G10.	Duty to Provide Information	As necessary	

**SPECIAL CONDITIONS****S1. DISCHARGE LIMITS****A. Process Wastewater Discharges**

All discharges and activities authorized by this permit must be consistent with the terms and conditions of this permit.

The discharge of any of the following pollutants more frequently than, or at a level in excess of that identified and authorized by this permit violates the terms and conditions of this permit.

Beginning on the effective date of this permit and lasting through the expiration date, the Permittee is authorized to discharge at the permitted locations subject to complying with the following limits:

<b>EFFLUENT LIMITS: Outfall 001 (Site 1&amp;2) – Discharge to Cowlitz River</b>		
<b>Parameter</b>	<b>Average Monthly <sup>a</sup></b>	<b>Maximum Daily <sup>b</sup></b>
Flow, Gallons per day (GPD)	N/A	2,200,000
<b>EFFLUENT LIMITS: INJECTION WELL</b>		
<b>Parameter</b>	<b>Maximum Instantaneous</b>	<b>Maximum Daily <sup>b</sup></b>
Flow, GPD	N/A	499, 000
Wellhead SU-909 Wellhead pressure	800 pounds per square inch (psi)	N/A
<sup>a.</sup> Average monthly effluent limit means the highest allowable average of daily discharges over a calendar month. To calculate the discharge value to compare to the limit, you add the value of each daily discharge measured during a calendar month and divide this sum by the total number of daily discharges measured.		
<sup>b.</sup> Maximum daily effluent limit means the highest allowable daily discharge. The daily discharge means the discharge of a pollutant measured during a calendar day		

**B. Specific Prohibitions, Injection Well**

1. The pressure during injection shall not initiate fractures to the confining Zones 2-9.
2. The injected wastewater shall not migrate into any underground source of drinking water (USDW) as defined in 40 Code of Federal Regulations (CFR) 144.3.
3. Formation fluids shall not be displaced into any USDW as a result of wastewater injection.
4. Injection between the outer most casing protecting any USDW and the well bore is prohibited.

## S2. MONITORING REQUIREMENTS

### A. Monitoring Schedule

The Permittee must monitor in accordance with the following schedule and must use the laboratory method, detection level (DL), and quantitation level (QL) specified in Appendix A of this permit.

Parameter	Units	Sample Point	Minimum Sampling Frequency	Sample Type
<b>1. Wastewater Effluent – Discharge to Cowlitz River</b>				
Flow	GPD	Outfall 001	Continuous when Discharging	Metered
<b>2. Underground Injection Monitoring</b>				
Flow	Total Gallons	Well SU-909 Wellhead	1/day (Total for 24-hour period) after start of injection	Measurement – Continuous Recorder
Wellhead injection pressure	psi	Well SU – 909, Wellhead	1/day (maximum for 24-hour period)	Measurement – Continuous Recorder
Casing pressure	psi	Well SU – 909, Wellhead	1/day (maximum for 24-hour period)	Measurement – Continuous Recorder
Monthly cumulative volume of injected wastewater	Million gallons	Well SU – 909, Wellhead	1/day after start of injection	Measurement – Continuous Recorder
Bottom Hole Pressure	psi	Well SU – 909, Wellhead	1/month after start of injection	Calculation (see below <b>Formation Monitoring – Post Injection</b> )
<b>3. Formation Monitoring – Post Injection</b>				
The Permittee must monitor the bottom-hole pressure at well SU - 909 according to the following schedule. Calculations must be based on a depth of 2,300 feet (top of zone 2).				
Bottom Hole Pressure	psi	Well SU-909	1/month after start of injection	Measurement/calculation
<b>4. Injection Water Monitoring</b>				
The Permittee must monitor wastewater injection according to the following schedule				
pH	S.U	Injection Well SU 909, Wellhead	quarterly <sup>a</sup>	Grab <sup>b</sup>
Conductivity	mmohs/cm	Injection Well SU 909,	quarterly <sup>a</sup>	Grab <sup>b</sup>

Parameter	Units	Sample Point	Minimum Sampling Frequency	Sample Type
		Wellhead		
Total dissolved solids	mg/L	Injection Well SU 909, Wellhead	quarterly <sup>a</sup>	Grab <sup>b</sup>
Total Solids	mg/L	Injection Well SU 909, Wellhead	quarterly <sup>a</sup>	Grab <sup>b</sup>
Sodium	mg/L	Injection Well SU 909, Wellhead	quarterly <sup>a</sup>	Grab <sup>b</sup>
Chloride	mg/L	Injection Well SU 909, Wellhead	quarterly <sup>a</sup>	Grab <sup>b</sup>
Turbidity	NTU	Injection Well SU 909, Wellhead	Yearly, After start of injection	Grab <sup>b</sup>
Color	SU	Injection well SU-909, Wellhead	Yearly, After start of injection	Grab <sup>b</sup>
Total hardness	mg/L	Injection well SU-909, Wellhead	Yearly, After start of injection	Grab <sup>b</sup>
Total alkalinity	mg/L	Injection well SU-909, Wellhead	Yearly, After start of injection	Grab <sup>b</sup>
Calcium	mg/L	Injection well SU-909, Wellhead	Yearly, After start of injection	Grab <sup>b</sup>
Magnesium	mg/L	Injection well SU-909, Wellhead	Yearly, After start of injection	Grab <sup>b</sup>
Manganese	mg/L	Injection well SU-909, Wellhead	Yearly, After start of injection	Grab <sup>b</sup>
Potassium	mg/L	Injection well SU-909, Wellhead	Yearly, After start of injection	Grab <sup>b</sup>
Iron	mg/L	Injection well SU-909, Wellhead	Yearly, After start of injection	Grab <sup>b</sup>

Parameter	Units	Sample Point	Minimum Sampling Frequency	Sample Type
Aluminum	mg/L	Injection well SU-909, Wellhead	Yearly, After start of injection	Grab <sup>b</sup>
Sulfate	mg/L	Injection well SU-909, Wellhead	Yearly, After start of injection	Grab <sup>b</sup>
Nitrate	mg/L	Injection well SU-909, Wellhead	Yearly, After start of injection (S3. B)	Grab <sup>b</sup>
Arsenic	mg/L	Injection well SU-909, Wellhead	Yearly, After start of injection	Grab <sup>b</sup>
Fluoride	mg/L	Injection well SU-909, Wellhead	Yearly, After start of injection	Grab <sup>b</sup>
Mercury	mg/L	Injection well SU-909, Wellhead	Yearly, After start of injection	Grab <sup>b</sup>
Cadmium	mg/L	Injection well SU-909, Wellhead	Yearly, After start of injection	Grab <sup>b</sup>
Lead	mg/L	Injection well SU-909, Wellhead	Yearly, After start of injection	Grab <sup>b</sup>
Zinc	mg/L	Injection well SU-909, Wellhead	Yearly, After start of injection	Grab <sup>b</sup>
Silica	mg/L	Injection well SU-909, Wellhead	Yearly, After start of injection	Grab <sup>b</sup>
BTEX	mg/L	Injection well SU-909, Wellhead	Yearly, After start of injection	Grab <sup>b</sup>

## 5. Monitoring Associated with collection pond monitoring wells

The monitoring wells in the freshwater aquifer up-gradient and down-gradient from the collection pond, each well shall be sampled according to the following schedule:

Total Dissolved Solids	mg/L	Pond monitoring Well	Quarterly <sup>a</sup>	Grab <sup>b</sup>
Chloride	mg/L	Pond monitoring	Quarterly <sup>a</sup>	Grab <sup>b</sup>



Parameter	Units	Sample Point	Minimum Sampling Frequency	Sample Type
		Well		
Sodium	mg/L	Pond monitoring Well	Quarterly <sup>a</sup>	Grab <sup>b</sup>
BTEX	mg/L	Pond monitoring Well	Quarterly <sup>a</sup>	Grab <sup>b</sup>
Conductivity	µmhos/cm	Pond monitoring Well	Quarterly <sup>a</sup>	Grab <sup>b</sup>
<sup>a</sup> Quarterly monitoring period should be January through March, April through June, July through September and October, November and December				
<sup>b</sup> Grab means an individual sample collected over a 15 minute, or less, period.				
<b>6. Monitoring Associated with Monitoring Well Downgradient from Well SU-909</b>				
Following installation of the monitoring well down-gradient from the injection well (SU-909), the well shall be sampled according to the following schedule				
Total Dissolved Solids	mg/L	Downgradient well	Yearly <sup>a</sup>	Grab <sup>b</sup>
Chloride	mg/L	Downgradient well	Yearly <sup>a</sup>	Grab <sup>b</sup>
Sodium	mg/L	Downgradient well	Yearly <sup>a</sup>	Grab <sup>b</sup>
Conductivity	µmhos/cm	Downgradient well	Yearly <sup>a</sup>	Grab <sup>b</sup>
<sup>a</sup> Yearly monitoring periods shall be from January through December				
<sup>b</sup> Grab means an individual sample collected over a fifteen (15) minute, or less, period.				

**B. Sampling and Analytical Procedures**

Samples and measurements taken to meet the requirements of this permit must represent the volume and nature of the monitored parameters, including representative sampling of any unusual discharge or discharge condition, including bypasses, upsets, and maintenance-related conditions affecting effluent quality.

Sampling and analytical methods used to meet the monitoring requirements specified in this permit must conform to the latest revision of the *Guidelines Establishing Test Procedures for the Analysis of Pollutants* contained in 40 CFR Part 136.

**C. Flow Measurement, Field Measurement and Continuous Monitoring Devices**

The Permittee must:

1. Select and use appropriate flow measurement, field measurement, and continuous monitoring devices and methods consistent with accepted scientific practices.

2. Install, calibrate, and maintain these devices to ensure the accuracy of the measurements is consistent with the accepted industry standard and the manufacturer's recommendation for that type of device.
3. Use field measurement devices as directed by the manufacturer and do not use reagents beyond their expiration dates.
4. Calibrate these devices at the frequency recommended by the manufacturer.
5. Calibrate flow monitoring devices at a minimum frequency of at least one calibration per year.
6. Maintain calibration records for at least three years.

D. Laboratory Accreditation

The Permittee must ensure that all monitoring data required by the Department of Ecology (Ecology) is prepared by a laboratory registered or accredited under the provisions of chapter 173-50 Washington Administrative Code (WAC), *Accreditation of Environmental Laboratories*. Flow, temperature, settleable solids, conductivity, pH, and internal process control parameters are exempt from this requirement. The Permittee must obtain accreditation for conductivity and pH if it must receive accreditation or registration for other parameters. Crops and soils data are process control parameters which do not require preparation by an accredited laboratory. However, the Permittee must obtain this data from a reputable agricultural test lab that is an active participant in a nationally recognized agricultural laboratory proficiency testing program.

E. Request for Reduction in Monitoring

The Permittee may request a reduction of the sampling frequency after 12 months of monitoring. Ecology will review each request and at its discretion grant the request through a permit modification or when it reissues the permit.

The Permittee must:

1. Provide a written request.
2. Clearly state the parameters for which it is requesting reduced monitoring.
3. Clearly state the justification for the reduction.

**S3. REPORTING AND RECORDKEEPING REQUIREMENTS**

The Permittee must monitor and report in accordance with the following conditions. The falsification of information submitted to Ecology is a violation of the terms and conditions of this permit.

A. Reporting

The first monitoring period begins on the effective date of the permit. The Permittee must:

1. Submit monitoring results each month.
2. Summarize, report, and submit monitoring data obtained during each monitoring period on a Discharge Monitoring Report (DMR) form provided, or otherwise approved, by Ecology.
3. Submit DMR forms monthly whether or not the facility was discharging. If the facility did not discharge during a given monitoring period, submit the form as required with the words "NO DISCHARGE" entered in place of the monitoring results.
4. Ensure that DMR forms are postmarked or received by Ecology no later than the 15th day of the month following the completed monitoring period, unless otherwise specified in this permit.
5. Submit priority pollutant analysis data no later than 45 days following the monitoring.
6. Send report(s) to Ecology at:

Water Quality Permit Coordinator  
Department of Ecology  
Southwest Regional Office  
P.O. Box 47775  
Olympia, WA 98504-7775

All laboratory reports providing data for organic and metal parameters must include the following information: sampling date, sample location, date of analysis, parameter name, CAS number, analytical method/ number, method detection limit (MDL) or laboratory quantitation limit (QL or ML), reporting units, and concentration detected. Analytical results from samples sent to a contract laboratory must have information on the chain of custody, the analytical method, QA/QC results, and documentation of accreditation for the parameter.

**B. Records Retention**

The Permittee must retain records of all monitoring information for a minimum of three years. Such information must include all calibration and maintenance records and all original recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit. The Permittee must extend this period of retention during the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by Ecology.

**C. Recording of Results**

For each measurement or sample taken, the Permittee must record the following information:

1. The date, exact place, method, and time of sampling or measurement.

2. The individual who performed the sampling or measurement.
3. The dates the analyses were performed.
4. The individual who performed the analyses.
5. The analytical techniques or methods used.
6. The results of all analyses.

D. Additional Monitoring by the Permittee

If the Permittee monitors any pollutant more frequently than required by Condition S2. of this permit, then the Permittee must include the results of such monitoring in the calculation and reporting of the data submitted in the Permittee's DMR.

E. Reporting Permit Violations

The Permittee must take the following actions when it violates or is unable to comply with any permit condition:

- a. Immediately take action to stop, contain, and cleanup unauthorized discharges or otherwise stop the noncompliance and correct the problem.
- b. If applicable, immediately repeat sampling and analysis. Submit the results of any repeat sampling to Ecology within 30 days of sampling.

1. Immediate Reporting

The Permittee must report any failure of the disinfection system, any collection system overflows, or any plant bypass discharging to a waterbody used as a source of drinking water immediately to the Department of Ecology and the Department of Health, Drinking Water Program at the numbers listed below:

Southwest Regional Office      360-407-6300

Department of Health, Drinking      360-521-0323 (business hours)  
Water Program      360-481-4901 (after business hours)

2. Twenty-four-hour Reporting

The Permittee must report the following occurrences of noncompliance by telephone, to Ecology at the telephone numbers listed above, within 24-hours from the time the Permittee becomes aware of any of the following circumstances:

- a. Any noncompliance that may endanger health or the environment, unless previously reported under subpart 1, above.
- b. Any unanticipated **bypass** that exceeds any effluent limitation in the permit (See Part S4.B., "Bypass Procedures").

- c. Any **upset** that exceeds any effluent limitation in the permit (See G.15, "Upset").
- d. Any violation of a maximum daily or instantaneous maximum discharge limitation for any of the pollutants in Section S1.A of this permit.
- e. Any overflow prior to the treatment works, whether or not such overflow endangers health or the environment or exceeds any effluent limitation in the permit.

3. Report within Five Days

The Permittee must also provide a written submission within five days of the time that the Permittee becomes aware of any event required to be reported under subparts 1 or 2, above. The written submission must contain:

- a. A description of the noncompliance and its cause.
- b. The period of noncompliance, including exact dates and times.
- c. The estimated time noncompliance is expected to continue if it has not been corrected.
- d. Steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.
- e. If the noncompliance involves an overflow prior to the treatment works, an estimate of the quantity (in gallons) of untreated overflow.

4. Waiver of Written Reports

Ecology may waive the written report required in subpart 3, above, on a case-by-case basis upon request if a timely oral report has been received.

5. All Other Permit Violation Reporting

The Permittee must report all permit violations, which do not require immediate or within 24-hours reporting, when it submits monitoring reports for S3.A ("Reporting"). The reports must contain the information listed in paragraph E.3, above. Compliance with these requirements does not relieve the Permittee from responsibility to maintain continuous compliance with the terms and conditions of this permit or the resulting liability for failure to comply.

6. Report Submittal

The Permittee must submit reports to the address listed in S3.

**F. Other Reporting**

The Permittee must report a spill of oil or hazardous materials in accordance with the requirements of Revised Code of Washington (RCW) 90.56.280 and chapter 173-303-145. You can obtain further instructions at the following website:

<http://www.ecy.wa.gov/programs/spills/other/reportaspill.htm> .

Where the Permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application, or in any report to Ecology, it must submit such facts or information promptly.

The Permittee must submit a new application or supplement at least 180 days prior to commencement of discharges, resulting from the activities listed below, which may result in permit violations. These activities include: any facility expansions, production increases, or other planned changes, such as process modifications, in the permitted facility.

The Permittee must keep a copy of this permit at the facility and make it available upon request to Ecology inspectors.

**S4. CLASS II WELL CONSTRUCTION AND OPERATION REQUIREMENTS****A. Construction Requirements**

Injection well SU-909 must be completed to prevent movement of fluid into or between underground sources of drinking water. The Permittee must follow the construction procedure outlined under 40 CFR 146.23, Subpart C – Criteria and Standards Applicable to Class II Wells.

**B. Operating Requirements**

The Permittee must follow the requirements specified under 40 CFR 146. 40 CFR 146 states that *“Injection pressure at the wellhead shall not exceed a maximum which shall be calculated so as to assure that the pressure during injection does not initiate new fractures or propagate existing fractures in the confining zone adjacent to the USDWs. In no case shall injection pressure cause the movement of injection or formation fluids into an underground source of drinking water. Injection between the outermost casing protecting underground sources of drinking water and the well bore shall be prohibited.”*

**C. Mechanical Integrity**

A mechanical integrity test, as described in 40 CFR 146.8, shall be conducted on injection well SU-909:

1. Prior to its use and at least once in the final year of the permit and prior to permit renewal once injection has begun.
2. Whenever protective casing or tubing is removed from the well.
3. Whenever the packer is resealed.

To provide Ecology the opportunity to witness any mechanical integrity test, the Permittee shall notify Ecology when a test is planned. This notification shall be as much in advance as practicable but not less than 72 hours.

The results of mechanical integrity tests shall be reported to Ecology within 30 days of the test and shall include a description of the test and the method used.

D. Well Failures

This permit requires the casing pressure at injection well SU-909 to be monitored and recorded daily. If pressure on the production casing indicates a leak in the injection tubing string, all injection of wastewaters shall be immediately stopped. Prior to further injection into the well, the leak shall be located and fixed.

E. Plugging and Abandonment

The Permittee shall maintain financial responsibility and resources to close, plug, and abandon the injection well as required by 40 CFR 144.52 (a)(7).

The Permittee shall notify Ecology at least 45 days before conversion or abandonment of the injection well.

**S5. OPERATION AND MAINTENANCE**

The Permittee must, at all times, properly operate and maintain all facilities or systems of treatment and control (and related appurtenances) which are installed to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems, which are installed by a Permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

A. Bypass Procedures

This permit prohibits a bypass which is the intentional diversion of waste streams from any portion of a treatment facility. Ecology may take enforcement action against a Permittee for a bypass unless one of the following circumstances (1, 2, or 3) applies.

1. Bypass for Essential Maintenance without the Potential to Cause Violation of Permit Limits or Conditions.

Bypass is authorized if it is for essential maintenance and does not have the potential to cause violations of limits or other conditions of this permit, or adversely impact public health as determined by Ecology prior to the bypass. The Permittee must submit prior notice, if possible, at least ten days before the date of the bypass.

2. Bypass which is Unavoidable, Unanticipated, and Results in Noncompliance of this Permit.

This bypass is permitted only if:

Bypass is unavoidable to prevent loss of life, personal injury, or severe property damage. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass.

No feasible alternatives to the bypass exist, such as:

- The use of auxiliary treatment facilities.
- Retention of untreated wastes.
- Stopping production.
- Maintenance during normal periods of equipment downtime, but not if the Permittee should have installed adequate backup equipment in the exercise of reasonable engineering judgment to prevent a bypass.
- Transport of untreated wastes to another treatment facility or preventative maintenance), or transport of untreated wastes to another treatment facility.

Ecology is properly notified of the bypass as required in condition S3E of this permit.

3. If bypass is anticipated and has the potential to result in noncompliance of this permit.
  - a. The Permittee must notify Ecology at least 30 days before the planned date of bypass. The notice must contain:
    - A description of the bypass and its cause.
    - An analysis of all known alternatives which would eliminate, reduce, or mitigate the need for bypassing.
    - A cost-effectiveness analysis of alternatives including comparative resource damage assessment.
    - The minimum and maximum duration of bypass under each alternative.
    - A recommendation as to the preferred alternative for conducting the bypass.
    - The projected date of bypass initiation.
    - A statement of compliance with SEPA.
    - A request for modification of water quality standards as provided for in WAC 173-201A-410, if an exceedance of any water quality standard is anticipated.



- Details of the steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass.
- b. For probable construction bypasses, the Permittee must notify Ecology of the need to bypass as early in the planning process as possible. The Permittee must consider the analysis required above during preparation of the engineering report or facilities plan and plans and specifications and must include these to the extent practical. In cases where the Permittee determines the probable need to bypass early, the Permittee must continue to analyze conditions up to and including the construction period in an effort to minimize or eliminate the bypass.
- c. Ecology will consider the following prior to issuing an administrative order for this type of bypass:
  - If the bypass is necessary to perform construction or maintenance-related activities essential to meet the requirements of this permit.
  - If feasible alternatives to bypass exist, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance during normal periods of equipment down time, or transport of untreated wastes to another treatment facility.
  - If the Permittee planned and scheduled the bypass to minimize adverse effects on the public and the environment.

After consideration of the above and the adverse effects of the proposed bypass and any other relevant factors, Ecology will approve or deny the request. Ecology will give the public an opportunity to comment on bypass incidents of significant duration, to the extent feasible. Ecology will approve a request to bypass by issuing an administrative order under RCW 90.48.120.

**B. Duty to Mitigate**

The Permittee is required to take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

**S6. APPLICATION FOR PERMIT RENEWAL**

The Permittee must submit an application for renewal of this permit **by January 2, 2014**.

**S7. NON-ROUTINE AND UNANTICIPATED DISCHARGES**

- A. Beginning on the effective date of this permit, the Permittee is authorized to discharge non-routine wastewater on a case-by-case basis if approved by Ecology. Prior to any such discharge, the Permittee must contact Ecology and **at a minimum** provide the following information:
1. The proposed discharge location.
  2. The nature of the activity that will generate the discharge.

3. Any alternatives to the discharge, such as reuse, storage, or recycling of the water.
  4. The total volume of water it expects to discharge.
  5. The results of the chemical analysis of the water. The Permittee must analyze the water for all constituents limited for the discharge. The analysis must also include hardness, any metals that are limited by water quality standards, and any other parameter deemed necessary by Ecology. All discharges must comply with the effluent limits as established in Condition S1. of this permit, water quality standards, and any other limits imposed by Ecology.
  6. The date of proposed discharge.
  7. The expected rate of discharge discharged, in gallons per minute. The Permittee must limit the discharge rate so it will not cause erosion of ditches or structural damage to culverts and their entrances or exits.
- B. The discharge cannot proceed until Ecology has reviewed the information provided and has authorized the discharge by letter to the Permittee or by an Administrative Order. Once approved and if the proposed discharge is to a municipal storm drain, the Permittee must obtain prior approval from the municipality and notify it when it plans to discharge.

**S8. SPILL PLAN**

The Permittee must:

1. Submit to Ecology an update to the existing Spill Control Plan by **January 2, 2014**.
2. Review the plan at least annually and update the Spill Plan as needed.
3. Send changes to the plan to Ecology.
4. Follow the plan and any supplements throughout the term of the permit.

The spill control plan must include the following:

1. A list of all oil and petroleum products and other materials used and/or stored on site, which when spilled, or otherwise released into the environment, designate as Dangerous (DW) or Extremely Hazardous Waste (EHW) by the procedures set forth in WAC 173-303-070. Include other materials used and/or stored on site which may become pollutants or cause pollution upon reaching state's waters.
2. A description of preventive measures and facilities (including an overall facility plot showing drainage patterns) which prevent, contain, or treat spills of these materials.
3. A description of the reporting system the Permittee will use to alert responsible managers and legal authorities in the event of a spill.
4. A description of operator training to implement the plan.

The Permittee may submit plans and manuals required by 40 CFR Part 112, contingency plans required by Chapter 173-303 WAC, or other plans required by other agencies which meet the intent of this section.

**GENERAL CONDITIONS****G1. SIGNATORY REQUIREMENTS**

- A. All applications, reports, or information submitted to Ecology must be signed and certified.

- (a) In the case of corporations, by a responsible corporate officer.

For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

- (b) In the case of a partnership, by a general partner.

- (c) In the case of sole proprietorship, by the proprietor.

- (d) In the case of a municipal, state, or other public facility, by either a principal executive officer or ranking elected official.

Applications for permits for domestic wastewater facilities that are either owned or operated by, or under contract to, a public entity shall be submitted by the public entity

- B. All reports required by this permit and other information requested by Ecology must be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

1. The authorization is made in writing by a person described above and submitted to Ecology.
2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)

- C. Changes to authorization. If an authorization under paragraph B.2 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph B.2

above must be submitted to Ecology prior to or together with any reports, information, or applications to be signed by an authorized representative.

- D. Certification. Any person signing a document under this section must make the following certification:

I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

## **G2. RIGHT OF INSPECTION AND ENTRY**

The Permittee must allow an authorized representative of Ecology, upon the presentation of credentials and such other documents as may be required by law:

- A. To enter upon the premises where a discharge is located or where any records must be kept under the terms and conditions of this permit.
- B. To have access to and copy - at reasonable times and at reasonable cost - any records required to be kept under the terms and conditions of this permit.
- C. To inspect - at reasonable times - any facilities, equipment (including monitoring and control equipment), practices, methods, or operations regulated or required under this permit.
- D. To sample or monitor - at reasonable times - any substances or parameters at any location for purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act.

## **G3. PERMIT ACTIONS**

This permit may be modified, revoked and reissued, or terminated either at the request of any interested person (including the Permittee) or upon Ecology's initiative. However, the permit may only be modified, revoked and reissued, or terminated for the reasons specified in 40 CFR 122.62, 122.64 or WAC 173-220-150 according to the procedures of 40 CFR 124.5.

- A. The following are causes for terminating this permit during its term, or for denying a permit renewal application:
  - 1. Violation of any permit term or condition.
  - 2. Obtaining a permit by misrepresentation or failure to disclose all relevant facts.

3. A material change in quantity or type of waste disposal.
  4. A determination that the permitted activity endangers human health or the environment or contributes to water quality standards violations and can only be regulated to acceptable levels by permit modification or termination [40 CFR part 122.64(3)].
  5. A change in any condition that requires either a temporary or permanent reduction or elimination of any discharge or sludge use or disposal practice controlled by the permit [40 CFR part 122.64(4)].
  6. Nonpayment of fees assessed pursuant to RCW 90.48.465.
  7. Failure or refusal of the Permittee to allow entry as required in RCW 90.48.090.
- B. The following are causes for modification but not revocation and reissuance except when the Permittee requests or agrees:
1. A material change in the condition of the waters of the state.
  2. New information not available at the time of permit issuance that would have justified the application of different permit conditions.
  3. Material and substantial alterations or additions to the permitted facility or activities which occurred after this permit issuance.
  4. Promulgation of new or amended standards or regulations having a direct bearing upon permit conditions, or requiring permit revision.
  5. The Permittee has requested a modification based on other rationale meeting the criteria of 40 CFR Part 122.62.
  6. Ecology has determined that good cause exists for modification of a compliance schedule, and the modification will not violate statutory deadlines.
  7. Incorporation of an approved local pretreatment program into a municipality's permit.
- C. The following are causes for modification or alternatively revocation and reissuance:
1. Cause exists for termination for reasons listed in A1 through A7, of this section, and Ecology determines that modification or revocation and reissuance is appropriate.
  2. Ecology has received notification of a proposed transfer of the permit. A permit may also be modified to reflect a transfer after the effective date of an automatic transfer (General Condition G8) but will not be revoked and reissued after the effective date of the transfer except upon the request of the new Permittee.

**G4. REPORTING PLANNED CHANGES**

The Permittee must, as soon as possible, but no later than sixty (60) days prior to the proposed changes, give notice to Ecology of planned physical alterations or additions to the permitted facility, production increases, or process modification which will result in: (1) the permitted facility being determined to be a new source pursuant to 40 CFR 122.29(b); (2) a significant change in the nature or an increase in quantity of pollutants discharged; or (3) a significant change in the Permittee's sludge use or disposal practices. Following such notice, and the submittal of a new application or supplement to the existing application, along with required engineering plans and reports, this permit may be modified, or revoked and reissued pursuant to 40 CFR 122.62(a) to specify and limit any pollutants not previously limited. Until such modification is effective, any new or increased discharge in excess of permit limits or not specifically authorized by this permit constitutes a violation.

**G5. PLAN REVIEW REQUIRED**

Prior to constructing or modifying any wastewater control facilities, an engineering report and detailed plans and specifications must be submitted to Ecology for approval in accordance with Chapter 173-240 WAC. Engineering reports, plans, and specifications must be submitted at least 180 days prior to the planned start of construction unless a shorter time is approved by Ecology. Facilities must be constructed and operated in accordance with the approved plans.

**G6. COMPLIANCE WITH OTHER LAWS AND STATUTES**

Nothing in this permit must be construed as excusing the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.

**G7. TRANSFER OF THIS PERMIT**

In the event of any change in control or ownership of facilities from which the authorized discharge emanate, the Permittee must notify the succeeding owner or controller of the existence of this permit by letter, a copy of which must be forwarded to Ecology.

**A. Transfers by Modification**

Except as provided in paragraph B below, this permit may be transferred by the Permittee to a new owner or operator only if this permit has been modified or revoked and reissued under 40 CFR 122.62(b)(2), or a minor modification made under 40 CFR 122.63(d), to identify the new Permittee and incorporate such other requirements as may be necessary under the Clean Water Act.

**B. Automatic Transfers**

This permit may be automatically transferred to a new Permittee if:

1. The Permittee notifies Ecology at least 30 days in advance of the proposed transfer date.
2. The notice includes a written agreement between the existing and new Permittee's containing a specific date transfer of permit responsibility, coverage, and liability between them.

3. Ecology does not notify the existing Permittee and the proposed new Permittee of its intent to modify or revoke and reissue this permit. A modification under the subparagraph may also be minor modification under 40 CFR 122.63. If this notice is not received, the transfer is effective on the date specified in the written agreement.

**G8. REDUCED PRODUCTION FOR COMPLIANCE**

The Permittee, in order to maintain compliance with its permit, must control production and/or all discharges upon reduction, loss, failure, or bypass of the treatment facility until the facility is restored or an alternative method of treatment is provided. This requirement applies in the situation where, among other things, the primary source of power of the treatment facility is reduced, lost, or fails.

**G9. REMOVED SUBSTANCES**

Collected screenings, grit, solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters must not be resuspended or reintroduced to the final effluent stream for discharge to state waters.

**G10. DUTY TO PROVIDE INFORMATION**

The Permittee must submit to Ecology, within a reasonable time, all information which Ecology may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Permittee must also submit to Ecology upon request, copies of records required to be kept by this permit.

**G11. OTHER REQUIREMENTS OF 40 CFR**

All other requirements of 40 CFR 122.41 and 122.42 are incorporated in this permit by reference.

**G12. ADDITIONAL MONITORING**

Ecology may establish specific monitoring requirements in addition to those contained in this permit by administrative order or permit modification.

**G13. PAYMENT OF FEES**

The Permittee must submit payment of fees associated with this permit as assessed by Ecology.

**G14. PENALTIES FOR VIOLATING PERMIT CONDITIONS**

Any person who is found guilty of willfully violating the terms and conditions of this permit is deemed guilty of a crime, and upon conviction thereof will be punished by a fine of up to ten thousand dollars (\$10,000) and costs of prosecution, or by imprisonment in the discretion of the court. Each day upon which a willful violation occurs is a separate and additional violation.

Any person who violates the terms and conditions of a waste discharge permit must incur, in addition to any other penalty as provided by law, a civil penalty in the amount of up to ten thousand dollars (\$10,000) for every such violation. Each and every such violation is a separate



and distinct offense, and in case of a continuing violation, every day's continuance is deemed to be a separate and distinct violation.

**G15. UPSET**

Definition – “Upset” means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limits because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limits if the requirements of the following paragraph are met.

A Permittee who wishes to establish the affirmative defense of upset must demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that: (1) an upset occurred and that the Permittee can identify the cause(s) of the upset; (2) the permitted facility was being properly operated at the time of the upset; (3) the Permittee submitted notice of the upset as required in condition S3.E; and (4) the Permittee complied with any remedial measures required under S4.C of this permit.

In any enforcement proceedings the Permittee seeking to establish the occurrence of an upset has the burden of proof.

**G16. PROPERTY RIGHTS**

This permit does not convey any property rights of any sort, or any exclusive privilege.

**G17. DUTY TO COMPLY**

The Permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

**G18. TOXIC POLLUTANTS**

The Permittee must comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if this permit has not yet been modified to incorporate the requirement.

**G19. PENALTIES FOR TAMPERING**

The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit will, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than two years per violation, or by both. If a conviction of a person is for a violation committed after a first conviction of such person under this Condition, punishment will be a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than four years, or by both.

**G20. REPORTING REQUIREMENTS APPLICABLE TO EXISTING MANUFACTURING, COMMERCIAL, MINING, AND SILVICULTURAL DISCHARGERS**

The Permittee belonging to the categories of existing manufacturing, commercial, mining, or silviculture must notify Ecology as soon as they know or have reason to believe:

- A. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following “notification levels:”
  - 1. One hundred micrograms per liter (100 µg/L).
  - 2. Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony.
  - 3. Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7).
  - 4. The level established by the Director in accordance with 40 CFR 122.44(f).
- B. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following “notification levels:”
  - 1. Five hundred micrograms per liter (500µg/L).
  - 2. One milligram per liter (1 mg/L) for antimony.
  - 3. Ten times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7).
  - 4. The level established by the Director in accordance with 40 CFR 122.44(f).

**G21. COMPLIANCE SCHEDULES**

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit must be submitted no later than 14 days following each schedule date.

## APPENDIX A

**EFFLUENT CHARACTERIZATION FOR POLLUTANTS  
THIS LIST INCLUDES EPA REQUIRED POLLUTANTS (PRIORITY POLLUTANTS) AND  
SOME ECOLOGY PRIORITY TOXIC CHEMICALS (PBTs)**

The following table specifies analytical methods and levels to be used for effluent characterization in NPDES and State waste discharge permits. This appendix specifies effluent characterization requirements of Ecology unless other methods are specified in the body of this permit.

This permit specifies the compounds and groups of compounds to be analyzed. Ecology may require additional pollutants to be analyzed within a group. The objective of this appendix is to reduce the number of analytical “non-detects” in permit-required monitoring and to measure effluent concentrations near or below criteria values where possible at a reasonable cost. If a Permittee knows that an alternate, less sensitive method (higher DL and QL) from 40 CFR Part 136 is sufficient to produce measurable results in their effluent, that method may be used for analysis.

<b>Pollutant &amp; CAS No. (if available)</b>	<b>Recommended Analytical Protocol</b>	<b>Detection (DL)<sup>1</sup> µg/L unless specified</b>	<b>Quantitation Level (QL)<sup>2</sup> µg/L unless specified</b>
<b>CONVENTIONALS</b>			
Biochemical Oxygen Demand	SM5210-B		2 mg/L
Chemical Oxygen Demand	SM5220-D		10 mg/L
Total Organic Carbon	SM5310-B/C/D		1 mg/L
Total Suspended Solids	SM2540-D		5 mg/L
Total Ammonia (as N)	SM4500-NH3-GH		0.3 mg/L
Flow	Calibrated device		
Dissolved oxygen	4500-OC/OG		0.2 mg/L
Temperature (max. 7-day avg.)	Analog recorder or Use micro-recording devices known as thermistors		0.2° C
pH	SM4500-H <sup>+</sup> B	N/A	N/A
<b>NONCONVENTIONALS</b>			
Total Alkalinity	SM2320-B		5 mg/L as CaCo3
Chlorine, Total Residual	4500 Cl G		50.0
Color	SM2120 B/C/E		10 color unit
Fecal Coliform	SM 9221D/E,9222	N/A	N/A
Fluoride (16984-48-8)	SM4500-F E	25	100
Nitrate-Nitrite (as N)	4500-NO3-E/F/H		100
Nitrogen, Total Kjeldahl (as N)	4500-NH3-C/E/FG		300
Ortho-Phosphate (PO <sub>4</sub> as P)	4500- PE/PF	3	10

<b>Pollutant &amp; CAS No. (if available)</b>	<b>Recommended Analytical Protocol</b>	<b>Detection (DL)<sup>1</sup> µg/L unless specified</b>	<b>Quantitation Level (QL)<sup>2</sup> µg/L unless specified</b>
Phosphorus, Total (as P)	4500-PE/PF	3	10
Oil and Grease (HEM)	1664A	1,400	5,000
Salinity	SM2520-B		3 PSS
Settleable Solids	SM2540 -F		100
Sulfate (as mg/L SO <sub>4</sub> )	SM4110-B		200
Sulfide (as mg/L S)	4500-S <sup>2</sup> F/D/E/G		200
Sulfite (as mg/L SO <sub>3</sub> )	SM4500-SO3B		2000
Total dissolved solids	SM2540 C		20 mg/L
Total Hardness	2340B		200 as CaCO <sub>3</sub>
Aluminum, Total (7429-90-5)	200.8	2.0	10
Barium Total (7440-39-3)	200.8	0.5	2.0
Boron Total (7440-42-8)	200.8	2.0	10.0
Cobalt, Total (7440-48-4)	200.8	0.05	0.25
Iron, Total (7439-89-6)	200.7	12.5	50
Magnesium, Total (7439-95-4)	200.7	10	50
Molybdenum, Total (7439-98-7)	200.8	0.1	0.5
Manganese, Total (7439-96-5)	200.8	0.1	0.5
Tin, Total (7440-31-5)	200.8	0.3	1.5
<b>METALS, CYANIDE &amp; TOTAL PHENOLS</b>			
Antimony, Total (7440-36-0)	200.8	0.3	1.0
Arsenic, Total (7440-38-2)	200.8	0.1	0.5
Beryllium, Total (7440-41-7)	200.8	0.1	0.5
Cadmium, Total (7440-43-9)	200.8	0.05	0.25
Chromium (hex) dissolved (18540-29-9)	SM3500-Cr EC	0.3	1.2
Chromium, Total (7440-47-3)	200.8	0.2	1.0
Copper, Total (7440-50-8)	200.8	0.4	2.0
Lead, Total (7439-92-1)	200.8	0.1	0.5
Mercury, Total (7439-97-6)	1631E	0.0002	0.0005
Nickel, Total (7440-02-0)	200.8	0.1	0.5
Selenium, Total (7782-49-2)	200.8	1.0	1.0
Silver, Total (7440-22-4)	200.8	0.04	0.2
Thallium, Total (7440-28-0)	200.8	0.09	0.36
Zinc, Total (7440-66-6)	200.8	0.5	2.5
Cyanide, Total (57-12-5)	335.4	2	10
Cyanide, Weak Acid Dissociable	SM4500-CN I	2	10
Phenols, Total	EPA 420.1		50
<b>DIOXIN</b>			
2,3,7,8-Tetra-Chlorodibenzo-P-Dioxin (176-40-16)	1613B	1.3 pg/L	5 pg/L
<b>VOLATILE COMPOUNDS</b>			
Acrolein (107-02-8)	624	5	10

<b>Pollutant &amp; CAS No. (if available)</b>	<b>Recommended Analytical Protocol</b>	<b>Detection (DL)<sup>1</sup> µg/L unless specified</b>	<b>Quantitation Level (QL)<sup>2</sup> µg/L unless specified</b>
Acrylonitrile (107-13-1)	624	1.0	2.0
Benzene (71-43-2)	624	1.0	2.0
Bromoform (75-25-2)	624	1.0	2.0
Carbon tetrachloride (56-23-5)	624/601 or SM6230B	1.0	2.0
Chlorobenzene (108-90-7)	624	1.0	2.0
Chloroethane (75-00-3)	624/601	1.0	2.0
2-Chloroethylvinyl Ether (110-75-8)	624	1.0	2.0
Chloroform (67-66-3)	624 or SM6210B	1.0	2.0
Dibromochloromethane (124-48-1)	624	1.0	2.0
1,2-Dichlorobenzene (95-50-1)	624	1.9	7.6
1,3-Dichlorobenzene (541-73-1)	624	1.9	7.6
1,4-Dichlorobenzene (106-46-7)	624	4.4	17.6
Dichlorobromomethane (75-27-4)	624	1.0	2.0
1,1-Dichloroethane (75-34-3)	624	1.0	2.0
1,2-Dichloroethane (107-06-2)	624	1.0	2.0
1,1-Dichloroethylene (75-35-4)	624	1.0	2.0
1,2-Dichloropropane (78-87-5)	624	1.0	2.0
1,3-dichloropropylene (mixed isomers) (542-75-6)	624	1.0	2.0
Ethylbenzene (100-41-4)	624	1.0	2.0
Methyl bromide (74-83-9) (Bromomethane)	624/601	5.0	10.0
Methyl chloride (74-87-3) (Chloromethane)	624	1.0	2.0
Methylene chloride (75-09-2)	624	5.0	10.0
1,1,2,2-Tetrachloroethane (79-34-5)	624	1.9	2.0
Tetrachloroethylene (127-18-4)	624	1.0	2.0
Toulene (108-88-3)	624	1.0	2.0
1,2-Trans-Dichloroethylene (156-60-5) (Ethylene dichloride)	624	1.0	2.0
1,1,1-Trichloroethane (71-55-6)	624	1.0	2.0
1,1,2-Trichloroethane (79-00-5)	624	1.0	2.0
Trichloroethylene (79-01-6)	624	1.0	2.0
Vinyl chloride (75-01-4)	624/SM6200B	1.0	2.0
<b>ACID COMPOUNDS</b>			
2-Chlorophenol (95-57-8)	625	1.0	2.0

Pollutant & CAS No. (if available)	Recommended Analytical Protocol	Detection (DL) <sup>1</sup> µg/L unless specified	Quantitation Level (QL) <sup>2</sup> µg/L unless specified
2,4-Dichlorophenol (120-83-2)	625	0.5	1.0
2,4-Dimethylphenol (105-67-9)	625	0.5	1.0
4,6-dinitro-o-cresol (534-52-1) (2-methyl-4,6,-dinitrophenol)	625/1625B	1.0	2.0
2,4 dinitrophenol (51-28-5)	625	1.0	2.0
2-Nitrophenol (88-75-5)	625	0.5	1.0
4-nitrophenol (100-02-7)	625	0.5	1.0
Parachlorometa cresol (59-50-7) (4-chloro-3-methylphenol)	625	1.0	2.0
Pentachlorophenol (87-86-5)	625	0.5	1.0
Phenol (108-95-2)	625	2.0	4.0
2,4,6-Trichlorophenol (88-06-2)	625	2.0	4.0
<b>BASE/NEUTRAL COMPOUNDS (compounds in bold are Ecology PBTs)</b>			
Acenaphthene (83-32-9)	625	0.2	0.4
Acenaphthylene (208-96-8)	625	0.3	0.6
Anthracene (120-12-7)	625	0.3	0.6
Benzidine (92-87-5)	625	12	24
Benzyl butyl phthalate (85-68-7)	625	0.3	0.6
Benzo(a)anthracene (56-55-3)	625	0.3	0.6
<b>Benzo(j)fluoranthene (205-82-3)</b>	625	0.5	1.0
<b>Benzo(r,s,t)pentaphene (189-55-9)</b>	625	0.5	1.0
Benzo(a)pyrene (50-32-8)	610/625	0.5	1.0
3,4-benzofluoranthene (Benzo(b)fluoranthene) (205-99-2)	610/625	0.8	1.6
11,12-benzofluoranthene (Benzo(k)fluoranthene) (207-08-9)	610/625	0.8	1.6
Benzo(ghi)Perylene (191-24-2)	610/625	0.5	1.0
Bis(2-chloroethoxy)methane (111-91-1)	625	5.3	21.2
Bis(2-chloroethyl)ether (111-44-4)	611/625	0.3	1.0
Bis(2-chloroisopropyl)ether (39638-32-9)	625	0.3	0.6
Bis(2-ethylhexyl)phthalate (117-81-7)	625	0.1	0.5
4-Bromophenyl phenyl ether (101-55-3)	625	0.2	0.4
2-Chloronaphthalene (91-58-7)	625	0.3	0.6

<b>Pollutant &amp; CAS No. (if available)</b>	<b>Recommended Analytical Protocol</b>	<b>Detection (DL)<sup>1</sup> µg/L unless specified</b>	<b>Quantitation Level (QL)<sup>2</sup> µg/L unless specified</b>
4-Chlorophenyl phenyl ether (7005-72-3)	625	0.3	0.5
Chrysene (218-01-9)	610/625	0.3	0.6
<b>Dibenzo (a,j)acridine (224-42-0)</b>	610M/625M	2.5	10.0
<b>Dibenzo (a,h)acridine (226-36-8)</b>	610M/625M	2.5	10.0
Dibenzo(a-h)anthracene (53-70-3)(1,2,5,6-dibenzanthracene)	625	0.8	1.6
Dibenzo(a,e)pyrene (192-65-4)	610M/625M	2.5	10.0
Dibenzo(a,h)pyrene (189-64-0)	625M	2.5	10.0
3,3-Dichlorobenzidine (91-94-1)	605/625	0.5	1.0
Diethyl phthalate (84-66-2)	625	1.9	7.6
Dimethyl phthalate (131-11-3)	625	1.6	6.4
Di-n-butyl phthalate (84-74-2)	625	0.5	1.0
2,4-dinitrotoluene (121-14-2)	609/625	0.2	0.4
2,6-dinitrotoluene (606-20-2)	609/625	0.2	0.4
Di-n-octyl phthalate (117-84-0)	625	0.3	0.6
1,2-Diphenylhydrazine ( <i>as Azobenzene</i> ) (122-66-7)	1625B	5.0	20
Fluoranthene (206-44-0)	625	0.3	0.6
Fluorene (86-73-7)	625	0.3	0.6
Hexachlorobenzene (118-74-1)	612/625	0.3	0.6
Hexachlorobutadiene (87-68-3)	625	0.5	1.0
Hexachlorocyclopentadiene (77-47-4)	1625B/625	0.5	1.0
Hexachloroethane (67-72-1)	625	0.5	1.0
Indeno(1,2,3-cd)Pyrene (193-39-5)	610/625	0.5	1.0
Isophorone (78-59-1)	625	0.5	1.0
<b>3-Methyl cholanthrene (56-49-5)</b>	625	2.0	8.0
Naphthalene (91-20-3)	625	0.3	0.6
Nitrobenzene (98-95-3)	625	0.5	1.0
N-Nitrosodimethylamine (62-75-9)	607/625	2.0	4.0
N-Nitrosodi-n-propylamine (621-64-7)	607/625	0.5	1.0
N-Nitrosodiphenylamine (86-30-6)	625	0.5	1.0
<b>Perylene (198-55-0)</b>	625	1.9	7.6
Phenanthrene (85-01-8)	625	0.3	0.6

<b>Pollutant &amp; CAS No. (if available)</b>	<b>Recommended Analytical Protocol</b>	<b>Detection (DL)<sup>1</sup> µg/L unless specified</b>	<b>Quantitation Level (QL)<sup>2</sup> µg/L unless specified</b>
Pyrene (129-00-0)	625	0.3	0.6
1,2,4-Trichlorobenzene (120-82-1)	625	0.3	0.6
<b>PESTICIDES/PCBs</b>			
Aldrin (309-00-2)	608	0.025	0.05
alpha-BHC (319-84-6)	608	0.025	0.05
beta-BHC (319-85-7)	608	0.025	0.05
gamma-BHC (58-89-9)	608	0.025	0.05
delta-BHC (319-86-8)	608	0.025	0.05
Chlordane (57-74-9)	608	0.025	0.05
4,4'-DDT (50-29-3)	608	0.025	0.05
4,4'-DDE (72-55-9)	608	0.025	0.05 <sup>10</sup>
4,4' DDD (72-54-8)	608	0.025	0.05
Dieldrin (60-57-1)	608	0.025	0.05
alpha-Endosulfan (959-98-8)	608	0.025	0.05
beta-Endosulfan (33213-65-9)	608	0.025	0.05
Endosulfan Sulfate (1031-07-8)	608	0.025	0.05
Endrin (72-20-8)	608	0.025	0.05
Endrin Aldehyde (7421-93-4)	608	0.025	0.05
Heptachlor (76-44-8)	608	0.025	0.05
Heptachlor Epoxide (1024-57-3)	608	0.025	0.05
PCB-1242 (53469-21-9)	608	0.25	0.5
PCB-1254 (11097-69-1)	608	0.25	0.5
PCB-1221 (11104-28-2)	608	0.25	0.5
PCB-1232 (11141-16-5)	608	0.25	0.5
PCB-1248 (12672-29-6)	608	0.25	0.5
PCB-1260 (11096-82-5)	608	0.13	0.5
PCB-1016 (12674-11-2)	608	0.13	0.5
Toxaphene (8001-35-2)	608	0.24	0.5

1. Detection level (DL) or detection limit means the minimum concentration of an analyte (substance) that can be measured and reported with a 99 percent confidence that the analyte concentration is greater than zero as determined by the procedure given in 40 CFR part 136, Appendix B.
2. Quantitation Level (QL) is equivalent to EPA's Minimum Level (ML) which is defined in 40 CFR Part 136 as the minimum level at which the entire GC/MS system must give recognizable mass spectra (background corrected) and acceptable calibration points. These levels were published as proposed in the Federal Register on March 28, 1997.